IN THE CLAIMS

Please amend the claims as follows:

Claims 1-12 (Canceled).

Claim 13 (Currently Amended) A method of producing an electrolyte membrane comprising:

providing a precursor membrane comprising a polymer which is capable of being graft polymerized;

exposing the surface of the precursor membrane to a plasma in an oxidative atmosphere to generate ~~a~~ surface carbonyl ~~group~~ groups, ~~a~~ surface hydroxyl ~~group~~ groups, or ~~a~~ surface carbonyl ~~group~~ groups and ~~a~~ surface hydroxyl ~~group~~ groups;

graft-polymerizing a side chain polymer to the plasma treated precursor membrane; and

introducing a proton conductive functional group to the side chain polymer.

Claim 14 (Canceled).

Claim 15 (Previously Amended): The method of Claim 13, wherein the polymer is at least one polymer selected from the group consisting of polyethylene, polypropylene, polyvinylchloride, polyvinylidenedichloride, polyvinylflouride, polyvinylidenedifluoride, polytetratfluoroethylene, ethylene-tetrafluoroethylene copolymer, tetrafluoroethylene-perfluoroalkylvinylether copolymer, and tetrafluoroethylene-hexafluoropropylene copolymer.

Claim 16 (Original): The method of Claim 13, wherein the side chain polymer is a hydrocarbon polymer to which at least one proton conductive group can be introduced.

Claim 17 (Original): The method of Claim 16, wherein the hydrocarbon polymer is at least one hydrocarbon polymer selected from the group consisting of poly(chloroalkyl styrene), poly(α-methyl styrene), poly(α-fluorostyrene), poly(p-chloromethyl styrene), polystyrene, and copolymers thereof.

Claim 18 (Original): The method of Claim 13, wherein the proton conductive functional group is a sulfonic acid group.

Claim 19 (Original): The method of Claim 15, wherein the proton conductive functional group is a sulfonic acid group.

Claim 20 (Original): The method of Claim 17, wherein the proton conductive functional group is a sulfonic acid group.

Claims 21-23 (Canceled).

Claim 24 (Previously Presented): The method of Claim 13, wherein said oxidative atmosphere comprises oxygen.

Claim 25 (Previously Presented): The method of Claim 13, wherein the precursor membrane comprises an ethylene-tetrafluoroethylene copolymer, the side chain polymer comprises polystyrene, and the proton conductive functional group is sulfonic acid.

Claim 26 (Canceled).